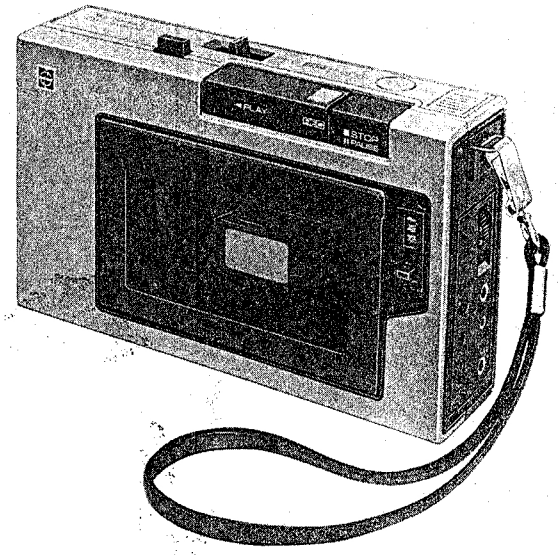
Service Manual

National
TAPE RECORDER
Panasonic

SOLID STATE CASSETTE TAPE RECORDER



RQ-212S MECHANISM SERIES

MODEL RQ-212DAS MODEL RQ-212DAS-E

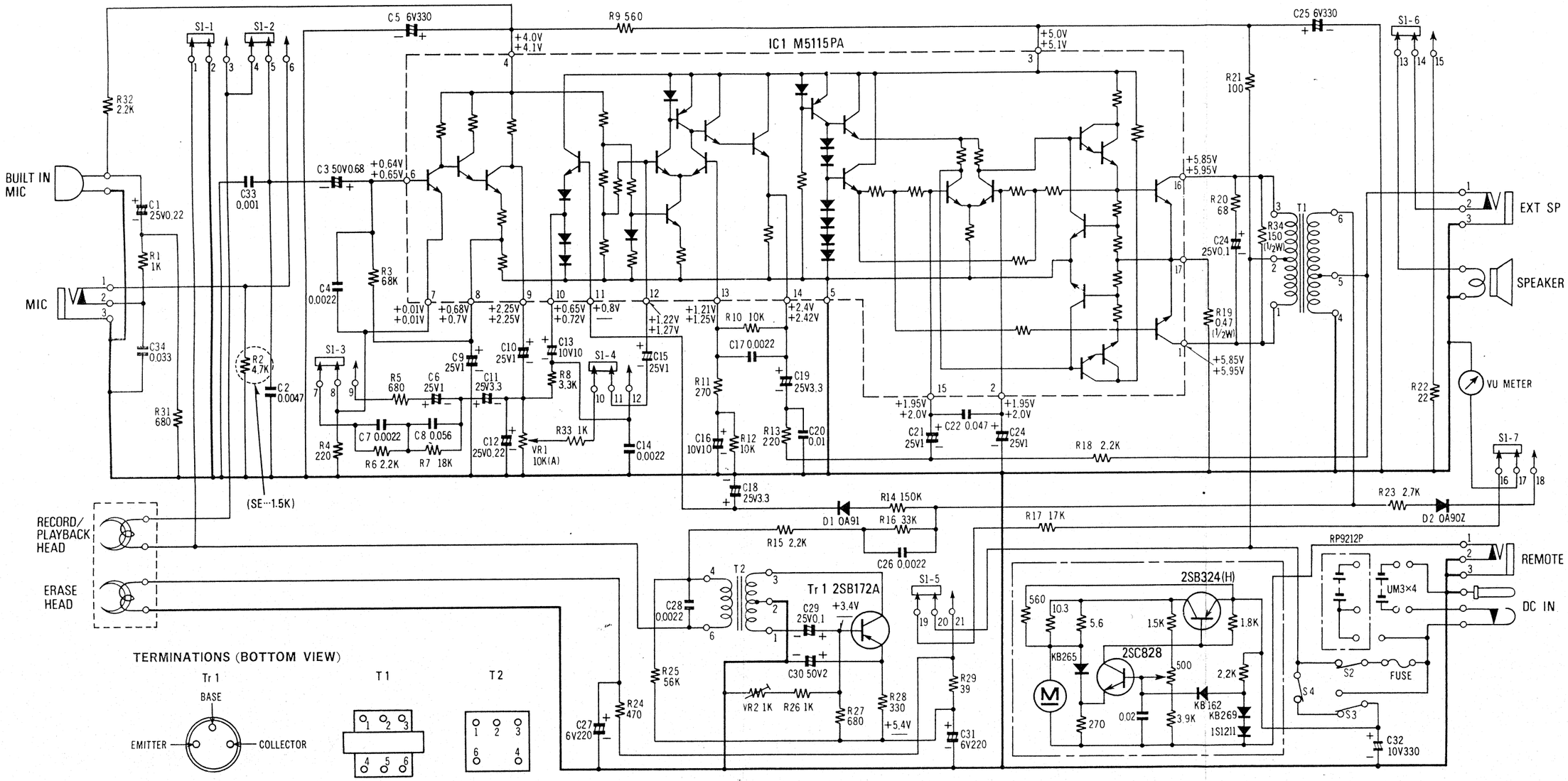
SPECIFICATIONS

Power Source:	DC: 6 volts (four AA size batteries) Car battery input: 6 volts (using NATIONAL PANASONIC optional car/boat adaptor RP-916) Optional rechargeable battery pack (RP-9214 with charger RP-665)
Power Output:	400 mW (max.)
Motor:	Electronic governor motor
IC:	M5115PA(1)
Transistor:	2SB172A(1)
Diodes:	OA91(1), OA90Z(1)
Recording Bias System:	AC bias
Track System:	2 tracks, monaural
Tape Speed:	1-7/8 ips. (4.8 cm)
Tape:	Cassette tape
Fast Forward Time and Rewind Time:	Approx. 90 seconds with C-60 cassette tape
Microphone:	Built-in condenser microphone
Input:	MIC −72 dB (0.3 mV)/4.7 kΩ
Output:	MONITOR 8Ω
Frequency Response:	80~10,000 Hz
Recording Time:	1 hour (using C-60 cassette tape)
Battery Life:	Approx. 5 hours, continuous use (using "Alkaline" batteries)
Speaker:	2-1/2″, round type, 8Ω
Dimensions:	6-1/2″(W) × 4″(H) × 1-3/4″(D)
Weight:	1-5/8 lbs.

These specifications are subject to change in order to accommodate improvements in design.

Matsushita Electric
Matsushita Electric Trading Co., Ltd.
P. O. Box 288, Central Osaka, Japan

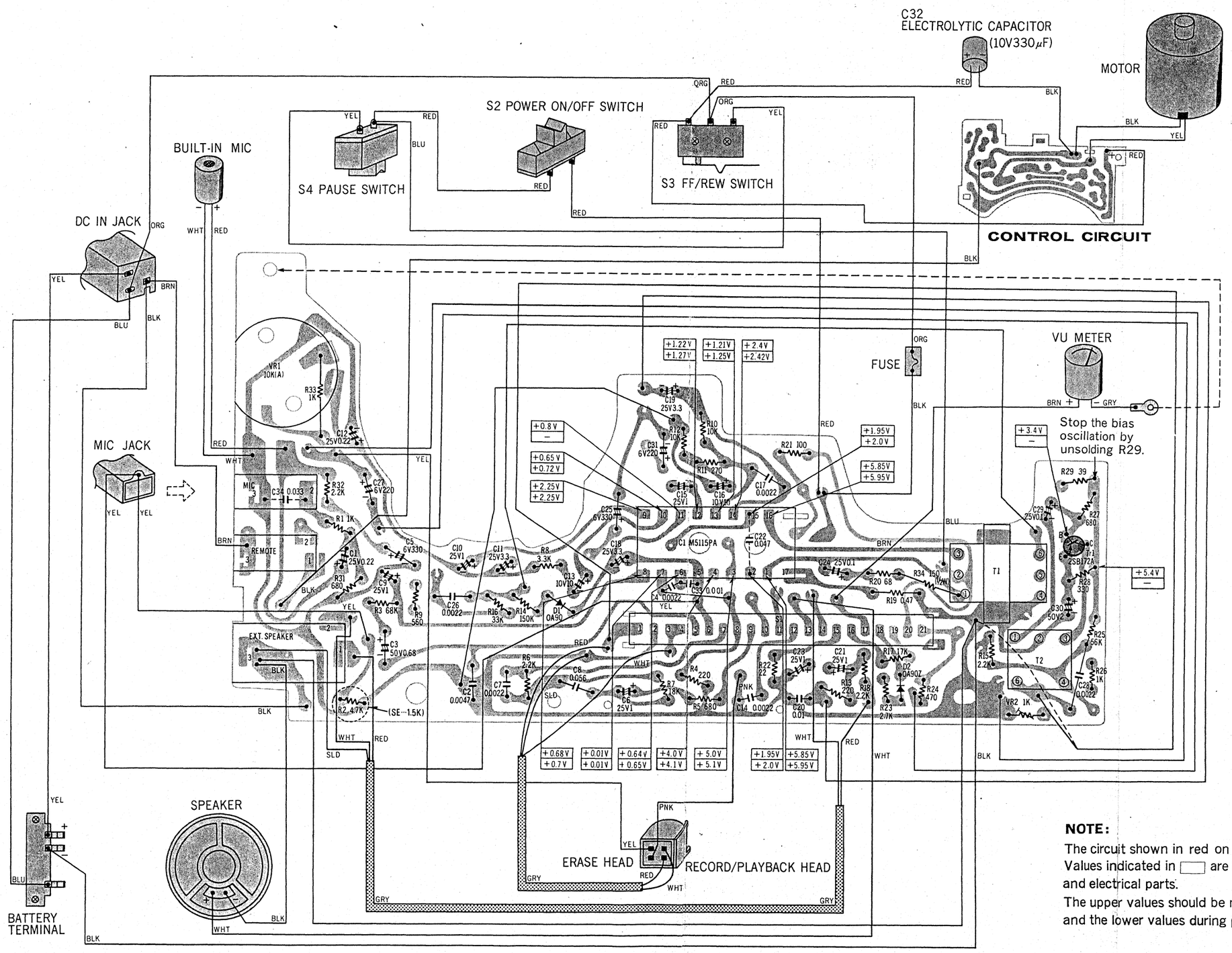
SCHEMATIC DIAGRAM MODEL RQ-212DAS, RQ-212DAS-E



NOTE:

1. S1 ..... Record/playback switch (shown in playback position).
2. S2 ..... Power ON/OFF switch.
3. S3 ..... FF/REW switch (coupled with FF/REW button).
4. S4 ..... Pause switch.
5. VR1 ..... Volume control VR.
6. VR2 ..... Bais current adjustment VR.
7. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise. K=1,000Ω.
8. Capacitor values are in microfarads (μF) unless specified otherwise. P=Pico-farads.
9. All measurements are under no signal conditions with volume at minimum position. Use VTVM for measurements.
10. The upper values should be measured during recording and the lower values during playback.

WIRING CONNECTION DIAGRAM MODEL RQ-212DAS, RQ-212DAS-E



NOTE:

BLK .....Black
BLU .....Blue
BRN .....Brown
GRY .....Gray
GRN .....Green
L.BLU.....Light Blue
NIL .....No Color Mark
ORG .....Orange
PNK .....Pink
RED .....Red
SLD .....Shield Wire
VLT .....Violet
WHT .....White
YEL .....Yellow

NOTE:

The circuit shown in red on the conductor is B circuit.
Values indicated in ▭ are DC voltages between the chassis and electrical parts.
The upper values should be measured during recording and the lower values during playback.

Printed in Japan